



REMARKS

Further to the response mailed September 24, 2004, Applicant submits herewith one copy of one sheet of replacement drawings. This replacement sheet is intended to further replace one of the replacement sheets (i.e., sheet 6/8) that was previously submitted with the response mailed September 24, 2004. Applicant requests that the Examiner approve this substitute sheet of drawings. A marked-up version of this substitute sheet of drawings is attached hereto with the change(s) shown with red ink markings. Support for depicting the acronym PFD is found at line 19, page 21 of this application as originally filed. Support for the depiction of detail numeral 66 is found at line 15, page 21 of this application as originally filed.

In view of the above, all the claims are considered patentable and allowance of all the claims is respectfully requested. The Examiner is invited to telephone the undersigned (at direct line 512-394-0118) for prompt action in the event any issues remain that prevent the allowance of any pending claims.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3204 of John Bruckner PC.

Respectfully submitted,

John Bruckner PC
Attorney(s) for Applicant(s)

[Signature]
John J. Bruckner
Reg. No. 35,816

Dated: October 5, 2004

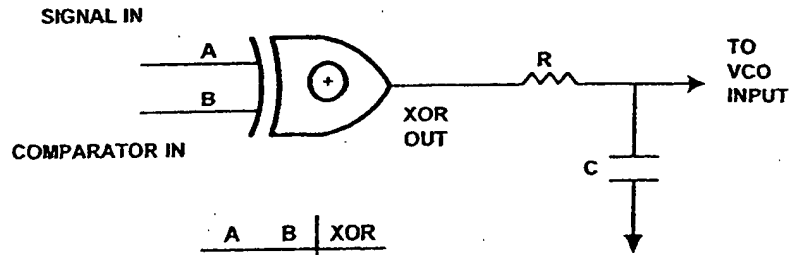
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Austin, TX 78739-1723
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IN THE DRAWINGS:

Please substitute the attached Replacement Sheet for its corresponding drawing sheet in this Application.

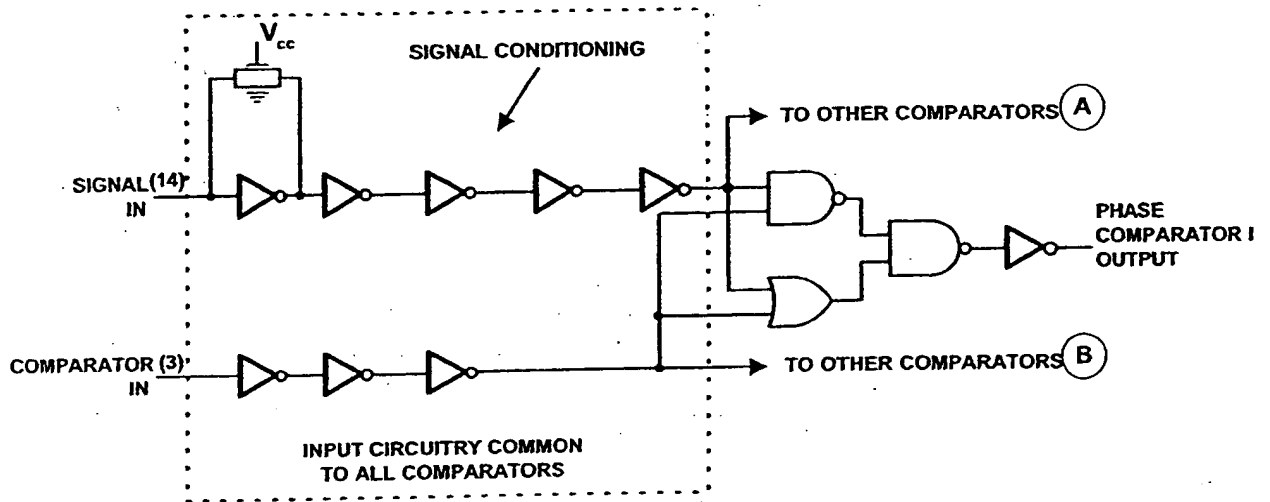


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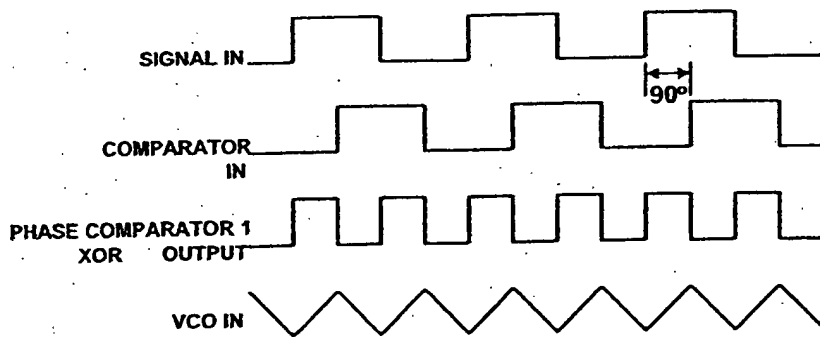


| A | B | XOR |
|---|---|-----|
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

(A) BASIC XOR PHASE COMPARATOR

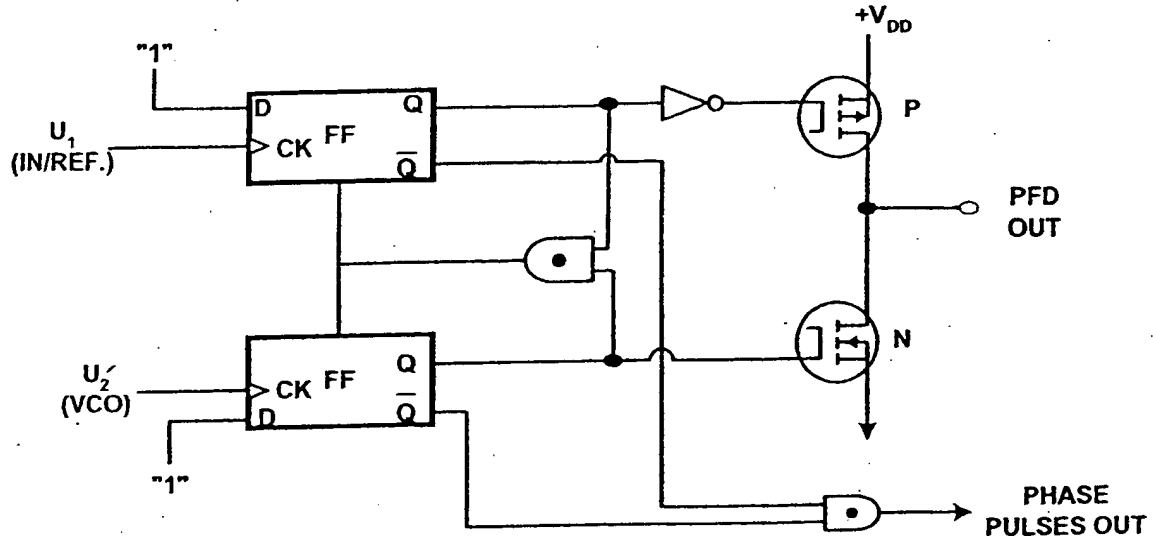


(B) DETAILED ON-CHIP IC CIRCUITRY IN 74HC4046

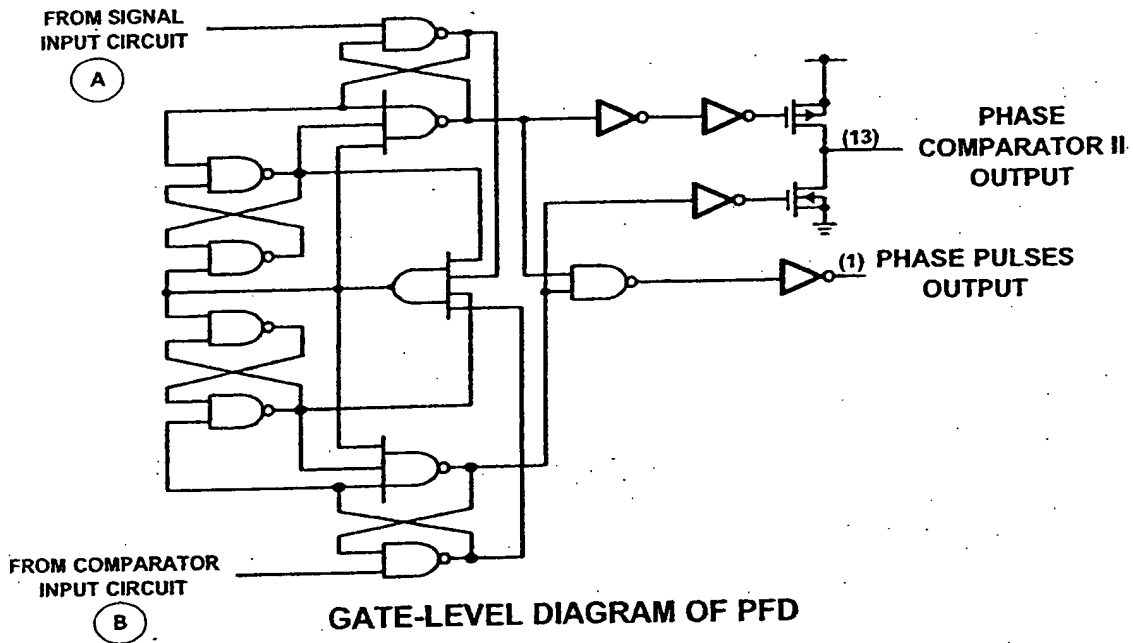


(C) TYPICAL XOR DETECTOR WAVEFORMS

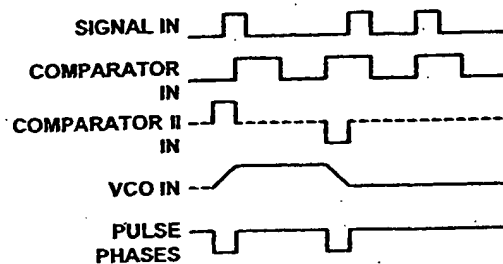
Fig. 4 (Prior Art)



HIGH-LEVEL DIAGRAM OF PFD (existing art)



GATE-LEVEL DIAGRAM OF PFD



TIMING AND WAVEFORMS OF PFD (existing art)

Fig. 4 cont. (Prior Art)

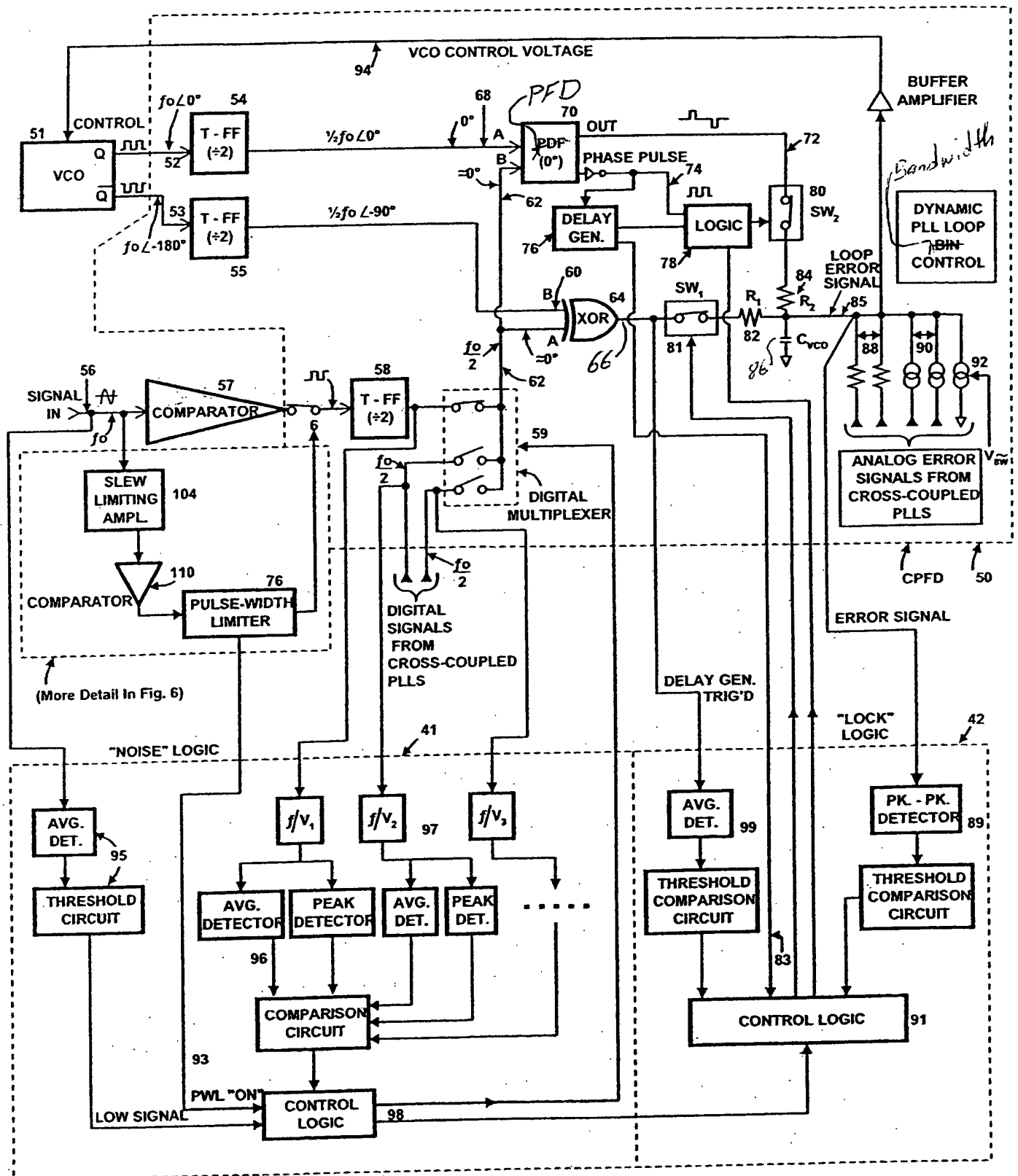


Fig. 5

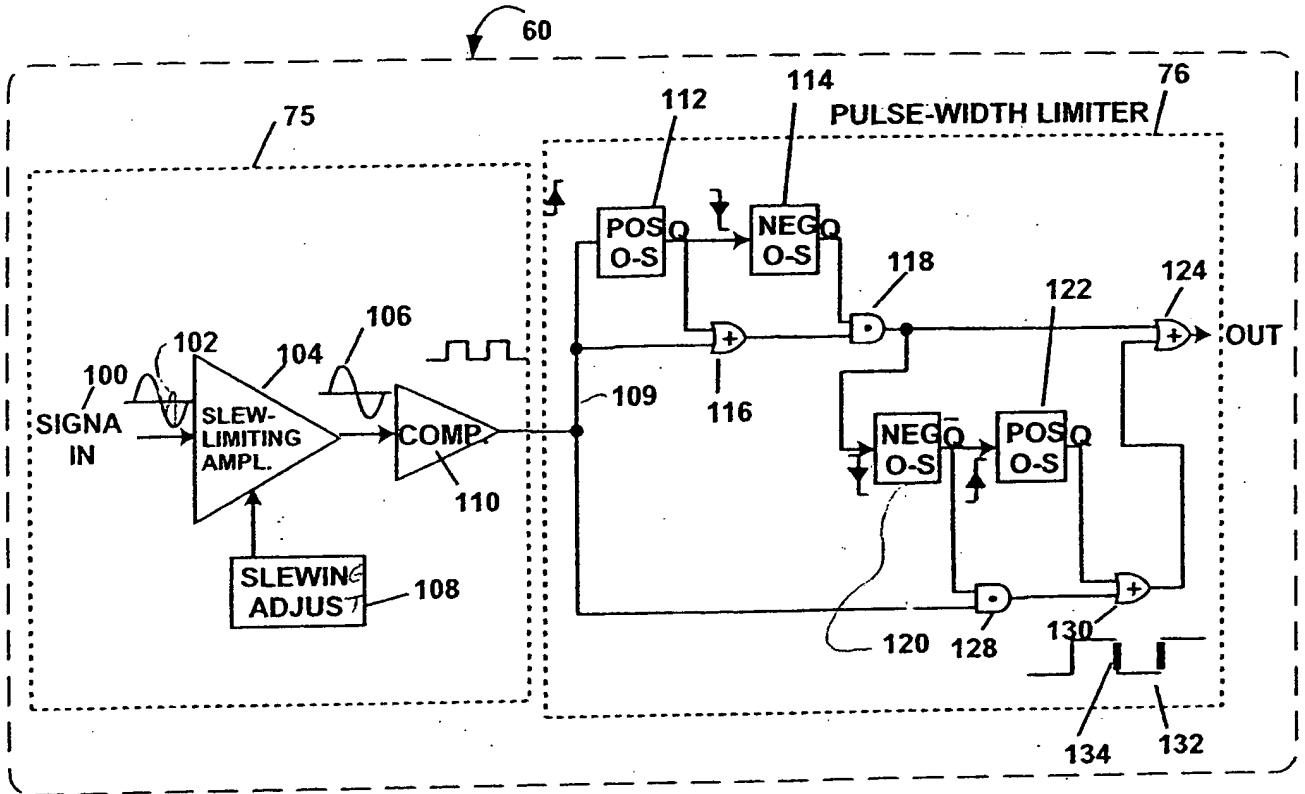


Fig. 6